WHAT IS CLAIMED IS:

1. A vaccine composition comprising an immunologically protective amount of a first attenuated, non-reverting mutant *Salmonella* bacterium in which two or more genes within the SPI2 region have been inactivated.

2. The vaccine composition of claim 1 wherein said genes are inactivated by deletion of a portion of the coding region of the gene.

3. The vaccine composition of claim 1 wherein said genes are inactivated by an insertional mutation.

4. The vaccine composition of claim 1 wherein the genes are (*ssa)* secretion system apparatus genes.

5. The vaccine composition of claim 1 wherein the genes are selected from the group consisting of *ssaT, ssaJ, ssaC* and *ssaM*, and wherein:

(a) said *ssaT* gene consists of SEQ ID NO: 1 or 2, or a full length nucleotide sequence that hybridizes to the non coding complement of SEQ ID NO: 1 or 2 under stringent conditions, or a full length *Salmonella* nucleotide sequence that has 95% sequence identity to SEQ ID NO: 1 or 2;

(b) said *ssaJ* gene consists of SEQ ID NO: 3 or 4, or a full length nucleotide sequence that hybridizes to the non coding complement of SEQ ID NO: 3 or 4 under stringent conditions, or a full length *Salmonella* nucleotide sequence that has 95% sequence identity to SEQ ID NO: 3 or 4;

(c) said *ssaC* gene consists of SEQ ID NO: 5 or 6, or a full length nucleotide sequence that hybridizes to the non coding complement of SEQ ID NO: 5 or 6 under stringent conditions, or a full length *Salmonella* nucleotide sequence that has 95% sequence identity to SEQ ID NO: 5 or 6; and

(d) said *ssaM* gene consists of SEQ ID NO: 7 or 30, or a full length nucleotide sequence that hybridizes to the non coding complement of SEQ ID NO: 7

or 30 under stringent conditions, or a full length *Salmonella* nucleotide sequence that has 95% sequence identity to SEQ ID NO: 7 or 30.

6. The vaccine composition of claim 5 wherein, in said first attenuated mutant *Salmonella* bacterium, *ssaT* and *ssaC* have been inactivated.

7. The vaccine composition of claim 2 wherein, in said first attenuated mutant *Salmonella* bacterium, *ssaT* and *ssaJ* have been inactivated.

8. The vaccine composition of claim 1 further comprising a second attenuated mutant *Salmonella* bacterium in which one or more genes within the SPI2 region have been inactivated.

9. The vaccine composition of claim 8 wherein said genes are selected from the group consisting of *ssaT, ssaJ, ssaC,* and *ssaM*.

10. The vaccine composition of claim 8 wherein said first and second mutant *Salmonella* bacteria are from different serogroups.

11. The vaccine composition of claim 1 or 8 wherein said *Salmonella* bacteria are *Salmonella enterica* subsp *Enterica.*

12. The vaccine composition of claim 1 or 8 wherein said *Salmonella* bacteria are from any of serogroups A, B, C_1, C_2, D_1 or E_1.

13. The vaccine composition of claim 8 wherein said first and second attenuated mutant *Salmonella* bacteria are selected from the group consisting of *S. dublin* and *S. typhimurium*.

14. The vaccine composition of claim 1 wherein said first attenuated mutant *Salmonella* bacterium further comprises a polynucleotide encoding a non-*Salmonella* polypeptide.

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15. A method of conferring protective immunity on a non-rodent animal comprising the step of administering to said animal a vaccine composition comprising an immunologically protective amount of an attenuated, non-reverting mutant *Salmonella* bacterium in which one or more genes within the SPI2 region have been inactivated.

16. The method of claim 15 wherein said immunologically protective amount of said attenuated bacterium provides an improvement in mortality, symptomatic diarrhea, physical condition, or milk production.

17. The method of claim 15 wherein said gene is inactivated by deletion of a portion of the coding region of the gene.

18. The method of claim 15 wherein said gene is a secretion system apparatus (*ssa)* gene.

19. The method of claim 15 wherein said genes are selected from the group consisting of *ssaT, ssaJ, ssaC* and *ssaM.*

20. A method of reducing the amount or duration of bacterial shedding during infection comprising the step of administering to a non-rodent animal a vaccine composition comprising an attenuated, non-reverting mutant *Salmonella* bacterium in which one or more genes within the SPI2 region have been inactivated, in an amount effective to reduce bacterial shedding by said animal.

21. The method of claim 20 wherein the amount of bacterial shedding is reduced by about 10% or more.

22. The method of claim 20 wherein the duration of bacterial shedding is reduced by about 10% or more.

23. The method of claim 20 wherein said gene is a secretion system apparatus (*ssa*) gene.

24. The methods of claim 20 wherein said gene is selected from the group consisting of *ssaT*, *ssaJ*, *ssaC*, and *ssaM*.

25. The method of claim 15 or 20 wherein said animal is selected from the group consisting of cattle, sheep, goats, horses, pigs, poultry and other birds, cats, dogs, and humans.

26. The method of claim 15 or 20 wherein said animal is a pig.

27. The method of claim 15 or 20 wherein said animal is cattle.

28. A method of delivering a polypeptide antigen to an animal comprising the step of administering the vaccine composition of claim 13 to said animal.